



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

us

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,822	06/23/2005	Florian Tauser	TAUSER ET AL - 3 PCT	8891
25889	7590	09/27/2006	EXAMINER	
WILLIAM COLLARD COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			LEE, JOHN D	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/540,822

Applicant(s)

TAUSER ET AL.

Examiner

John D. Lee

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20050623</u> | 6) <input type="checkbox"/> Other: ____ |

The single sheet of drawing filed in this application on June 23, 2005, is acceptable.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Receipt is acknowledged of papers submitted by the International Bureau in this 371 National Stage Application under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

Claims 3-6 and 13 are objected to because of the following informalities: In each of claims 3, 5, 6, and 13, the terminology "is switched" is confusing and does not appear to be the correct choice of words (at least for the English language). The context indicates that terminology such as "is placed" or "is located" is what is truly intended. Claim 4 is objectionable because of the "preferably" phrase which appears in the last line thereof. The inclusion of preferences in a claim leads to uncertainty over the intended scope or boundary of the claim. Moreover, preferences are properly set forth in the specification rather than in a single claim. See MPEP § 2173.05(c). Appropriate correction is required.

Claims 1-14 are allowable over the prior art of record. The references cited on the attached forms PTO-892 and PTO-1449 represent the closest known prior art. The prior art fails to disclose or suggest a device which frequency converts infrared femtosecond light pulses from a tunable laser so as to produce converted visible picosecond light pulses, wherein the frequency converting element's output is used to

tune the laser and wherein an optical stretcher is used to increase the pulse duration of the converted visible light pulses to be picosecond pulses (at least 1 ps pulses). The teachings of the prior art are set forth below.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The two U.S. Patents to Galvanauskas et al describe the production of ultrashort optical pulses which involves the use of nonlinear optical converters and pulse stretchers. There is no laser tuning, however, of the type set forth in applicant's claims. The Imeshev et al document, which is not available for use as a reference against the claims because of its late filing date, is another disclosure similar to those of Galvanauskas et al, and which teaches tuning of the converted pulses but not of the fundamental laser pulses. The three U.S. Patents to Goto et al illustrate other optical generators for ultrashort wavelength-tunable pulses, but these documents also do not describe the use of a pulse stretcher or converter-driven laser tuning in the manner claimed by applicant. Other printed prior art documents which closely resemble those just discussed, but which likewise do not disclose the claimed fundamental laser tuning mechanism, can be seen in Hugonnot et al and in Klein et al.

All of the prior art documents listed in the Information Disclosure Statement submitted by applicant on June 23, 2005, have been considered and made of record. Note the attached initialed copy of form PTO-1449. These documents suffer the same deficiencies (with respect to applicant's claims) as the documents discussed in the immediately preceding paragraph. For example, the International Examiner has

described the Herrmann et al prior art document quite accurately in the International Preliminary Examination Report in the parent PCT Application PCT/EP04/01855.

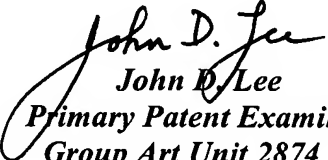
This application is in condition for allowance except for the following formal matters:

The objections to the claims as outlined above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO (2) MONTHS** from the mailing date of this letter.

Any inquiry concerning the merits of this communication should be directed to Examiner John D. Lee at telephone number (571) 272-2351. The Examiner's normal work schedule is Tuesday through Friday, 6:30 AM to 5:00 PM. Any inquiry of a general or clerical nature (i.e. a request for a missing form or paper, etc.) should be directed to the Technology Center 2800 receptionist at telephone number (571) 272-1562, to the technical support staff supervisor (Team 8) at telephone number (571) 272-1564, or to the Technology Center 2800 Customer Service Office at telephone number (571) 272-1626.


John D. Lee
Primary Patent Examiner
Group Art Unit 2874